

## Patent Abstracts of Japan

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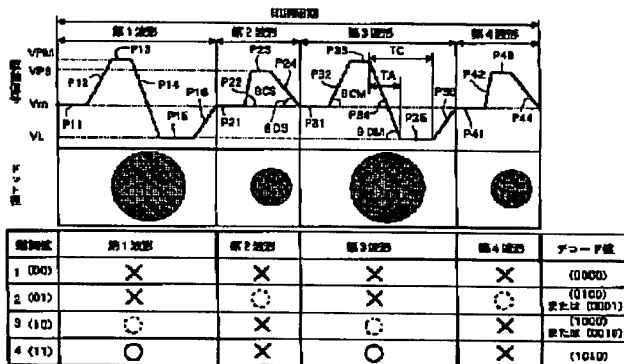
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TITLE : INK JET PRINTING APPARATUS AND  
PRINTING METHOD



ABSTRACT : PROBLEM TO BE SOLVED: To realize high-grade gradation printing without lowering a printing time by variably controlling a recording dot diameter and to prevent the generation of a cross talk phenomenon.

SOLUTION: In this ink jet printing method, a single drive signal is formed from first and third waveforms emitting ink droplets corresponding to a medium dot and second and fourth waveforms emitting ink droplets corresponding to a small dot. The second and fourth waveforms related to the small dot oscillate a meniscus rapidly to emit minute ink droplets. Therefore, when adjacent piezoelectric vibrators are driven at the same time, a cross stalk phenomenon is apt to occur. Then, when a small dot is formed, waveforms different at every adjacent nozzles (piezoelectric vibrators) are inputted and the nozzles are driven, at different timing.

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